

**CLAIMS**

1. A deformable flexible pouch of the one-piece type, capable of containing liquid or pasty fluid products, which comprises a rigid upper part (3) comprising an orifice neck (5) and a flexible and deformable lower part (4) and is assigned to means intended for ensuring the dispensing of said products without the return of air into the pouch, the two parts (3, 4) being articulated on one another in such a way that the top of the inner wall of the lower part (4) is laid against the inner wall of the upper part (3) during the shrinkage of the pouch (2), characterized in that the flexible lower part (4) of the pouch has a contraction (7) forming a concertina having a form such that it is folded back onto the inner wall of the rigid upper part (3) when it shrinks, said contraction (7) being formed in the upper part of the flexible pouch (2).
2. The flexible pouch as claimed in claim 1, characterized in that the inside diameter of said contraction (7) is slightly greater than the diameter of the neck (5) of the pouch.
3. The flexible pouch as claimed in either one of the preceding claims, characterized in that the rigid upper part (3) of the pouch has a substantially frustoconical form, and its rigidity is sufficient to prevent any deformation of this part of the pouch during the shrinkage of the latter.
4. The flexible pouch as claimed in claim 3, characterized in that the upper part (3) of the pouch has the form of a dome opening at its center in order to be connected to the neck (5) of the pouch.
5. The flexible pouch as claimed in any one of the preceding claims, characterized in that the contraction (7) in the upper part of the flexible pouch is arranged

in such a way that the wall (13) of the flexible pouch which is adjacent to this contraction, on the same side as the neck (5) of the pouch, is of substantially frustoconical form, the base of this flexible cone  
5 frustum being connected to the base of the rigid frustoconical upper part (3) along the zone of articulation of the two parts to one another.

6. The flexible pouch as claimed in claim 5,  
10 characterized in that the diameter of the base of the rigid upper part (3) supporting the zone of articulation to the lower part (4) of the pouch is slightly greater than the outside diameter of the zone of connection of the contraction (7) to the side wall  
15 of the pouch.

7. The flexible pouch as claimed in any one of the preceding claims, characterized in that the base of the flexible pouch (2) has a concave form (11) reinforced  
20 by means of a diametral crossmember (12).

8. A device for packaging and dispensing liquid or pasty fluid products, characterized in that it comprises a flexible pouch as claimed in any one of the  
25 preceding claims, assigned to a rigid bottle (1) and to a manual pump without an air inlet (15).

9. The device as claimed in claim 8, characterized in that the pouch (2) is mounted on the neck (5) of the  
30 rigid bottle (1) in a leaktight manner and comprises an air circuit (22) consisting of one or more transverse grooves (21) formed on the periphery (9) of the base of the rigid upper part (3) of the pouch, in the zone of articulation between the upper part (3) and the lower  
35 part (4).

10. The device as claimed in claim 8, characterized in that the pouch is mounted in a leaktight manner on the neck (5) of the rigid bottle (1), the bottom of which

comprises a vent (26) equipped with a flap valve (27) and with a filter (28).

11. The device as claimed in any one of claims 8 to 5 10, characterized in that the periphery (9) of the rigid upper part (3) of the pouch rests on a shoulder (10) formed in the inner wall of the bottle (1).

12. The device as claimed in claim 11, characterized 10 in that the body (16) of the pump is fastened to the orifice (6) of the rigid bottle (1) by conventional means from above the pouch (2).